Amendments to Specification:

Page 22, line 17, please replace the paragraph beginning on line 5 as follows:

--Fig. 15A shows an architecture of a base station 32 suitable for use in a GSM wireless communication network, to which is added, in order to embed a chirp navigation signal, a second signal generator 34 emitting a low power, wideband navigation signal confined to the operator's allocated GSM spectrum. The navigation signal power can be designed to balance the conflicting demands of position determination accuracy and mutual interference between the navigation and communication signals. Preferably, the navigation signal power is set to 1% (-20 dB) of the communication signal power. The second generator 34 is synchronized to the communications frame structure. Its output is subsequently passed through upconverters, filters and amplifiers. More specifically, in Fig. 15A a conventional base station controller 31 outputs a communication signal to be transmitted to a mobile unit by way of a legacy transmit antenna. The base station controller 31 outputs the communication signal to a base station transceiver section 33. The base station transceiver section outputs frame timing to a bimodal chirp modulator 34 that generates the bimodal chirp navigational signal. The bimodal chirp modulator outputs the chirp navigation signal for embedding in the communication signal by way of diplexer 35. Diplexer 35 modifies the communication signal output from the base transceiver section 23 by embedding the chirp navigation signal within the communication signal. The diplexer outputs the composite signal to the transmitter RF chain 36 for transmission using antenna 37.--

Page 24, please replace the paragraph beginning on line 9 as follows:

--A mobile unit receiver, such as the receiver shown in either Figs. 7 or 11, acquires the communication signal with the embedded navigation signal broadcast by a local base station in operation 46. The mobile unit then performs a call set up procedure 47 and sets a counter n equal to 1 in operation 48. The mobile terminal then, in operation 49, acquires another distant base station, namely the base station corresponding to the variable n. The mobile unit determines in operation 50 if it has acquired enough base stations to perform a navigation solution. If not, the variable n is incremented by 1 in operation 51 and additional base stations are acquired. If enough base stations have been acquired then the mobile unit begins a new update interval in operation 52. Here, another variable m is set equal to 1 in operation 53 and the mobile unit measures the time of arrival (TOA) to the m-th base station in operation 54. The mobile unit then determines in operation 55 if the TOA has been measured to enough base stations to perform the position solution, and if not, the variable m is incremented by 1 in operation 56. If the TOA has been measured to enough base stations then in operation 57 the mobile terminal uplinks the TOA, or pseudorange measurements to a local base station. The local base station determines the mobile unit's position, or alternatively, a central navigation processing site in communication with the local base station determines the mobile unit's position in operation 58. The processing flow returns back to operation 52 and the mobile unit begins a new update interval to continue determining and measuring TOAs to various base stations in order to further update its position.--